

REMARKS

Reconsideration and allowance are respectfully requested. Claims 1-7 and 15-20 stand rejected and claims 8-14 have been withdrawn from consideration. Applicant has amended claim 1 and has added new claim 21. Consequently, claims 1-21 are pending upon entry of this Amendment. No new matter has been added.

Formal issues

The Office Action requested affirmation of the provisional election of Group I (claims 1- 7 and 15-20) for prosecution. Applicant confirms election of Group I with traverse and withdrawal of the claims 8-14 from further consideration at this time as being drawn to a non-elected invention. Should generic independent claim 1 be found allowable, Applicant will request entry and consideration of Group II (claims 8-14).

Applicant thanks the Examiner for acknowledging Applicant's claim for foreign priority. Applicant has enclosed a certified copy of the United Kingdom application filed on February 18, 2000 to comply with 35 U.S.C § 119(b).

§ 102 rejections

Claims 1-7 and 15-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,180,038 to Arnold et al. ("Arnold"). Applicant respectfully traverses this rejection.

Applicant has amended independent claim 1 to clarify that the actuator applies force in a first direction to drive an output member in a first direction (from a rest condition to an actuated condition) and also applies force in a second direction to drive the output member in

the second direction (from the actuated condition to the rest condition). In other words, claim 1 clarifies that the actuator operates in two different directions to drive the output member in two different directions.

Arnold fails to disclose the claimed invention because the electric motor 50 in Arnold applies force in the same, single direction for both brake release and brake actuation. More particularly, to release a parking brake, Arnold teaches driving the electric motor 50 to apply a force to the left against the biasing force of a compression spring, thereby displacing a movable member 8 to the left until the member 8 reaches a brake-released position. The member 8 is retained in the brake-released position by cooperation between a clutch spring 70 and a drive screw 36 (col. 5, line 64 to col. 6, line 20). In other words, the electric motor 50 in Arnold applies a force to the left to drive the member 8 to the left.

When the parking brake is actuated, the drive screw 36 is released, allowing the member 8 to move to the right via expansion of the compression spring 30. The member 8 is driven by forces in the spring 30, not the motor 50, to the brake actuation position. More particularly, the compression spring 30 expands, applying a biasing force to the right to move the member 8 to the right. Arnold also teaches using the motor 50 to control the return travel speed of the member 8 as it moves to the right, but does not disclose moving the output member in a second direction, as alleged by the Office Action. Because the biasing force of the spring 30 is toward the right and therefore moves the member 8 toward the right, any force applied by the motor 50 to control the member's return travel speed must be applied to the left, against the biasing force of the compression spring 30. Thus, regardless of the travel direction of the member 8, the motor 50 always applies a force in a single direction (e.g., to the left), either to move the member 8 to the brake-release position or to slow the member 8

as it is being driven in the opposite direction by the biasing force of the compression spring 30 to the brake-actuated position.

Independent claim 1, by contrast, specifically recites an actuator that applies a force in a first direction and a second direction to drive the output member to and from the actuated condition, respectively. In other words, the claimed actuator applies force in two different directions depending on whether the output member is to be moved to the actuated condition or to the rest condition. Arnold therefore fails to anticipate claim 1. Claims 2-7 and 15-20 depend directly or independently on claim 1 and are therefore also not disclosed by Arnold. Withdrawal of the rejection is therefore respectfully requested.

Applicant has added new claim 21 to further claim the subject matter of the invention. Claim 21 is a method claim covering the same general subject matter as claim 1 and therefore does not constitute new matter. Entry and allowance of new claim 21 is therefore respectfully requested.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance, and a Notice to that effect is earnestly solicited.

Respectfully submitted,



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CERTIFICATE OF MAIL

I hereby certify that the enclosed Response is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Assistant Commissioner of Patents, Washington D.C. 20231 on this 24 day of July, 2002.


Laura Combs

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APPENDIX A
Claims

(Version With Markings to Show Changes Made)

1. (Once amended) An actuator assembly comprising:

an actuator drivingly connected by a transmission path to an output member, said actuator being ~~capable of moving~~ operable to apply a force in a first direction to drive said output member in a ~~the~~ first direction from a rest condition to an actuated condition, and also being ~~capable of moving~~ operable to apply a force in a second direction to drive said output member in a ~~the~~ second direction from said actuated condition to said rest condition; and

an energy storing member, in which movement of said output member by said actuator in said first direction is assisted by said energy storing member and movement of said output member by said actuator in said second direction stores energy in said energy storing member.